

# AGRICULTURE OPTIONAL

(2027-2028)

# DECEMBER **BATCH**

Live CLASSES & TEST SERIES

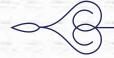




### Why Optional Matter in UPSC CSE

Choosing the right optional subject in UPSC CSE Mains can significantly influence your chances of success. It's a highly strategic decision and should be based on multiple factors such as your background, interest, aptitude, availability of resources, and overlap with GS papers. Below is a detailed evaluation of each of the subjects you mentioned — both English and Hindi medium options — to help you make an informed choice:

### **Optional Subject**



### The Hidden Power in UPSC Mains





#### 500 Marks at Stake

Optional contributes **500 out of 1750** marks in the Mains exam. A high score here can **transform your final rank**.

#### The Real Differentiator

While GS papers level the field, the **optional creates the gap.** Many toppers owe their ranks to an outstanding optional score.



#### **Scoring with Strategy**

Optional subjects, with a well-defined syllabus and less competition, offer a chance to score much higher than GS papers — if approached smartly.

#### **Subject Familiarity Pays Off**

Choosing an optional aligned with your **interest or academic background** makes preparation smoother and answers stronger.





#### **Overlap = Smart Preparation**

Subjects like PSIR, Sociology, and Anthropology offer content that overlaps with GS, Essay, and Interview, giving you multiple benefits from single preparation.

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### **Exploring the Merits of Agriculture**

Taking Agriculture as an optional subject in the UPSC Civil Services Examination (CSE) can offer several strategic advantages—especially for candidates with a background in life sciences, agriculture, or related fields.

#### SCORING POTENTIAL

- Agriculture is known for objective and scientific content, which allows candidates to write precise, fact-based answers.
- Topics are data-driven and diagram-based, which UPSC tends to reward well if presented clearly.



**EASY TO SCORE 300+ MARKS** 



Highest score – 311/500

#### **OVERLAP WITH GS PAPERS**

 There is decent overlap with General Studies (GS) Paper III (Agriculture, Food security, Agrarian reforms, Environment and ecology, Biotechnology), GS Paper II (Rural development, policies for farmers), GS I (Geography – soil science, rocks and minerals etc.)



#### CONCISE AND STATIC SYLLABUS



- The syllabus is concise and static, especially compared to humanities subjects like sociology or political science.
- Fewer updates required each year from current affairs.

#### **LESS COMPETITION**

Fewer aspirants choose Agriculture, which could reduce direct competition as compared to the other optional like PSIR, anthro etc



#### **HIGHEST SELECTION RATION**



The selection ratio is around 10% every year

#### ONE OF THE BIGGEST MYTHS ABOUT AGRICULTURE OPTIONAL

That it's only for students with a science or Agri background. In reality, Agriculture
is one of the most accessible and beginner-friendly optional in UPSC



#### A PLUS POINT FOR SCIENCE STUDENTS



 Candidates with backgrounds in Botany, Zoology, Environmental Science, Biology, or Agriculture Engineering find it easier to grasp the syllabus and concepts.

#### **ADVANTAGE IF PREPARING FOR IFOS**

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### StudyIQ Offerings

#### **LIVE Classes**

The essence of this Program is the Live classes. StudyIQ through our expert faculties will be conducting Live classes every week from Monday to Saturday.

#### LIVE Doubts Clearing Sessions

LIVE Doubts Clearing Sessions where students can directly ask questions and clarify their doubts with instructors or subject experts. These sessions are a vital part of our Program .

#### Recorded Classes

Recorded Class after every Live class will be Provided . Learn at your own pace – ideal for working professionals or students with busy schedules .

#### Hand Written Notes

Before every class, you will be provided with class notes in the form of CRUX. After the classes, we will be providing the lecture / board PPTs and handwritten notes of that class.

#### Previous Year Questions

Actual questions that appeared in the Optional Exam in previous years will be Provided This will help in Identifying weak Areas.

#### Current Affairs Classes

Understanding current affairs adds context to your knowledge. All Current Events related to Optionals will be added in the course.

#### Mains Answer Writting

Mains answer writing will be conducted throughout the program with evaluation.

#### One to One Mentorship

During your entire journey, our mentors will track your progress and guide you through your academic journey. Your Mentor will act like a friend, philosopher and guide so that you can have a personalized help during the preparation journey.

#### Mains Test Series

A weekly Mains answer writing will be conducted throughout the program.

#### Weekly Doubt Clearing Sessions

Weekly Doubts Clearing Sessions where students can directly ask questions and clarify their doubts with instructors or subject experts. These sessions are a vital part of our Program.

## Optional Package Comparison

Features	Gold	Platinum
400+ hours of live lectures spread over 6 months	$\checkmark$	$\checkmark$
Live Doubt Clearing Sessions with Faculty	<b>√</b>	<b>√</b>
Recorded Lectures & Hand written Notes or Crux	$\checkmark$	<b>√</b>
Comprehensive Coverage of Every Topic with PYQ Discussion	<b>√</b>	<b>√</b>
Current affairs to keep the aspirants updated	$\checkmark$	$\checkmark$
Regular answer writing sessions with evaluation	×	<b>√</b>
One to one Mentorship 24*7	×	<b>√</b>
Mains Test Series (Sectional & Full Length Test)	×	<b>√</b>
Weekly Doubt Clearing Sessions with Faculty	×	<b>√</b>
Validity	18 Months	30 Months



PAPER 1			
Date	Topic	Sub-Topic	
08 December		Orientation	
08 December	Plant Physiology	<ul> <li>Principles of Plant Physiology with reference to plant nutrition, absorption, translocation and metabolism of nutrients.</li> </ul>	
		• Soil - water- plant relationship.	
	ac as 26 as 26	Enzymes and plant pigments;	
		<ul> <li>Photosynthesis- modern concepts and factors affecting.</li> </ul>	
		• C3, C4 and CAM mechanisms.	
		<ul> <li>Factors affecting aerobic and anaerobic respiration;</li> </ul>	
		Carbohydrate, Protein and fat metabolism.	
		<ul> <li>Growth and development; photoperiodism and vernalilzation.</li> </ul>	
	111111	<ul> <li>Plant growth substances and their role in crop production.</li> </ul>	
		<ul> <li>Physiology of seed development and germination; dormancy.</li> </ul>	
		• Stress physiology - drought, salt and water stress	
20 December	Horticulture And	<ul> <li>Major fruits, plantation crops, vegetables, spices and flower crops</li> </ul>	
	Landscape Gardening	Package practices of major horticultural crops.	
		• Protected cultivation and high tech horticulture.	
		<ul> <li>Post-harvest technology and value addition of fruits and vegetables</li> </ul>	
		Landscaping and commercial floriculture	
		Medicinal and aromatic plants.	
		• Role of fruits and vegetables in human nutrition.	
02 January	Plant Protection	<ul> <li>Diagnosis of pests and diseases of field crops, vegetables, orchard and plantation crops and their economic importance.</li> </ul>	
		<ul> <li>Classification of pests and diseases and their management.</li> </ul>	
		Integrated pest and disease management.	
		<ul> <li>Storage pests and their management. Biological control of pests and diseases.</li> </ul>	
		Epidemiology and forecasting of major crop pests and diseases.	
		Plant quarantine measures.	
		<ul> <li>Pesticides, their formulation and modes of action.</li> </ul>	

						200		PAPER 2
	D	ate	2			T	opic	Sub-Topic
09	Jan	iua	ry	10 10 18	A HOLLIN	An	od oduction d Nutrition nagement	<ul> <li>Food production and consumption trends in India.</li> <li>Food security and growing population - vision</li> </ul>
						Ma	nagement	2020.
								Reasons for grain surplus.
								National and international food policies.
								Production, procurement, distribution constraints.
								<ul> <li>Availability of food grains, per capita expenditure on food.</li> </ul>
					10.0			<ul> <li>Trends in poverty, Public Distribution System and Below Poverty Line population, Targeted Public Distribution System (PDS), policy implementation in context to globalization.</li> </ul>
								Processing constraints.
								<ul> <li>Relation of food production to National Dietary Guidelines and food consumption pattern.</li> </ul>
								Food based dietary approaches to eliminate hunger.
								<ul> <li>Nutrient deficiency – 1. Micro nutrient deficiency, Protein Energy Malnutrition or Protein Calorie Malnutrition (PEM or PCM),</li> </ul>
								<ul> <li>Micro nutrient deficiency and HRD in context of work capacity f women and children.</li> </ul>
								Food grain productivity and food security.
14	Jan	uar	У			EC	OLOGY	Ecology and its relevance to man
								Natural resources, their sustainable management and conservation
								Physical and social environment as factors of crop distribution and production.
					ì			<ul> <li>Agro ecology; cropping pattern as indicators of environments.</li> </ul>
								<ul> <li>Environmental pollution and associated hazards to crops, animals and humans.</li> </ul>
	5							Climate change - International conventions and global initiatives.
								Greenhouse effect and global warming.
**								Advance tools for ecosystem analysis - Remote
			100			0917		sensing (RS) and Geographic Information Systems (GIS).

Date	Topic	Sub-Topic
23 January	Agronomy	Cropping patterns in different agro-climatic zones of the country.
		Impact of high yielding and short-duration varieties on shifts in cropping patterns.
		<ul> <li>Concepts of various cropping and farming systems.</li> </ul>
		Organic and Precision farming.
		<ul> <li>Package of practices for production of important cereals, pulses, oil seeds, fibres, sugar, commercial and fodder crops.</li> </ul>
01 Feburary	Soil Science	Soil- physical, chemical and biological properties.
		Processes and factors of soil formation.
	75551	Soils of India.
		Mineral and organic constituents of soils and their role in maintaining soil productivity.
		Essential plant nutrients and other beneficial elements in soils and plants.
55555	55555	Principles of soil fertility, soil testing and fertilizer recommendations.
		Integrated nutrient management.
		Bio-fertilizers.
		Losses of nitrogen in soil, nitrogen-use efficiency in submerged rice soils, nitrogen fixation in soils.
		Efficient phosphorus and potassium use.
		Problem soils and their reclamation.
		Soil factors affecting greenhouse gas emission
08 Feburary	Soil And Water Conservation	Soil conservation
	Conservation	Integrated watershed management.
		Soil erosion and its management. Dry land agriculture and its problems.
		Technology for stabilizing agriculture production in rain fed areas.
		Water-use efficiency in relation to crop • production,
		Criteria for scheduling irrigations,
		Ways and means of reducing runoff losses of irrigation water.
		Rainwater harvesting.
	***	Drip and sprinkler irrigation.
	54) in 54; in 56, in	Drainage of waterlogged soils,
		Quality of irrigation water
		Effect of industrial effluents on soil and water
		pollution.
		Irrigation projects in India.

Agriculture Extension  Weed Science	<ul> <li>Agricultural extension, its importance and role</li> <li>Methods of evaluation of extension programmes,</li> <li>Socio-economic survey and status of big, small and marginal farmers and landless agricultural labourers.</li> <li>Training programmes for extension workers</li> <li>Role of Krishi Vigyan Kendra's (KVK) in dissemination of Agricultural technologies.</li> <li>Non-Government Organization (NGO) and self-help group approach for rural development.</li> <li>Weeds - their characteristics.</li> </ul>
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Science	
Science	<ul> <li>Dissemination and association with various crops; their multiplications;</li> </ul>
	<ul> <li>Cultural, biological, and chemical control of weeds.</li> </ul>
Forestry	Important features and scope
	<ul> <li>Various types of forestry plantations such as social forestry, agro-forestry, and natural forests.</li> </ul>
	Propagation of forest plants.
	• Forest products. Agro forestry and value addition
	Conservation of forest flora and fauna.
Agricultural economics	<ul> <li>Farm management, scope, importance and characteristics, farm planning.</li> </ul>
	Optimum resource use and budgeting.
	• Economics of different types of farming systems.
	<ul> <li>Marketing management - strategies for development, market intelligence.</li> </ul>
	<ul> <li>Price fluctuations and their cost; role of co-operatives in agricultural economy;</li> </ul>
	<ul> <li>Types and systems of farming and factors affecting them.</li> </ul>
	Agricultural price policy.
	• Crop Insurance.
	Agricultural

		PAPER 1
Date	Topic	Sub-Topic
22 March	Cell Biology	Cell structure, function and cell cycle.
		<ul> <li>Synthesis, structure and function of genetic material.</li> </ul>
		• Laws of heredity.
		Chromosome structure, chromosomal aberrations
		<ul> <li>Linkage and cross-over, and their significance in recombination breeding.</li> </ul>
		Polyploidy, euploids and aneuploids.
		• Mutations - and their role in crop improvement.
		<ul> <li>Heritability, sterility and incompatibility, classification and their application in crop improvement.</li> </ul>
		<ul> <li>Cytoplasmic inheritance, sex-linked, sex-influenced and sex-limited characters.</li> </ul>
02 April	Plant	History of plant breeding.
	Breeding	<ul> <li>Modes of reproduction, selfing and crossing techniques.</li> </ul>
		<ul> <li>Origin, evolution and domestication f crop plants centre of origin, law of homologous series, crop genetic resources conservation and utilization.</li> </ul>
		<ul> <li>Application of principles of plant breeding, improvement of crop plants.</li> </ul>
		<ul> <li>Molecular markers and their application in plant improvement.</li> </ul>
		<ul> <li>Pure-line selection, pedigree, mass and recurrent selections, combining ability, its significance in plant breeding.</li> </ul>
		Heterosis and its exploitation.
		Somatic hybridization.
		Breeding for disease and pest resistance.
		<ul> <li>Role of interspecific and intergeneric hybridization.</li> </ul>
		<ul> <li>Role of genetic engineering and biotechnology in crop improvement.</li> </ul>
12 April	Seed	<ul><li>Genetically modified crop plants.</li><li>Seed production and processing technologies.</li></ul>
	Production And Technology	<ul> <li>Seed certification, seed testing and storage. DNA finger printing and seed registration.</li> </ul>
		<ul> <li>Role of public and private sectors in seed production and marketing.</li> </ul>
		<ul> <li>Intellectual Property Rights (IPR) issues, WTO issues and its impact on Agriculture</li> </ul>

Date	Topic	Sub-Topic
8 March	Soil And	Soil conservation
	Water Conservation	Integrated watershed management.
		<ul> <li>Soil erosion and its management. Dry land agriculture and its problems.</li> </ul>
		<ul> <li>Technology for stabilizing agriculture production in rain fed areas.</li> </ul>
		Water-use efficiency in relation to crop production,
		Criteria for scheduling irrigations,
		<ul> <li>Ways and means of reducing runoff losses of irrigation water.</li> </ul>
		Rainwater harvesting.
		Drip and sprinkler irrigation.
		Drainage of waterlogged soils,
		Quality of irrigation water
		Effect of industrial effluents on soil and water pollution.
		• Irrigation projects in India.
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## **Our Faculty**



### **Monika Yadav**

### Agriculture Faculty | UPSC Mentor

- ▶ UPSC Mains Experience: Appeared in 2022 & 2023 with Agriculture as the Optional Subject
- ► **Teaching Background:** Taught at HAU, CGB, and other reputed institutions, mentoring agriculture optional aspirants
- Academic Qualifications:
  - B.Sc. in Plant Biotechnology
  - M.Sc. in Food Science and Technology from Haryana Agricultural University, Hisar
- ▶ **Certifications:** Qualified ICAR ASRB NET in 2017
- Research Excellence: Master's thesis selected by ICAR as Best Thesis, reflecting academic rigor and innovation
- Known for combining academic depth with exam-relevant insights, making agriculture optional both understandable and high scoring.

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### **Our Prices**







### **Director's Desk**

#### **Dear UPSC Aspirants,**

At StudyIQ IAS, we know that the journey to becoming a civil servant is not just about studying—it's about dreams, struggles, and relentless perseverance. We have walked this path with thousands of aspirants, learning from your challenges, evolving with your needs, and celebrating your victories. Today, we take that commitment one step further with our most comprehensive and inclusive program yet—The FOUNDATION Batch.

This is not just another course; it's a game-changer. Whether you are starting fresh or refining your strategy, FOUNDATION provides everything you need—from live & recorded lectures, handwritten notes, structured test series, daily quizzes, answer writing practice, interview guidance, and one-on-one mentorship—all in a single, well-structured program. We believe financial constraints should never hold back a dream, which is why we offer affordable pricing, a full fee refund for those who clear Prelims, and ₹11,000 rewards for top performers.

More than just a batch, FOUNDATION is a promise—a promise that no matter where you are in your UPSC journey, you will never feel alone. You will have the best resources, unwavering mentorship, and a community that supports you at every step. This is your time, your moment—to rise, to conquer, and to turn your dream into reality.

Join the FOUNDATION Batch today and take the first step towards your IAS dream with confidence!

Best Regards, Director's Desk

